

### **REMARKS**

The Office Action dated June 3, 2004, has been received and carefully noted. The above amendments and the following remarks are submitted as a full and complete response thereto.

By this amendment, claims 1, 6, 7, 9 and 10 have been amended. Support for the amendments to claims 1, 6, 7, 9 and 10 can be found in the Figures as originally filed. No new matter has been added. Claims 1-10 are pending and respectfully submitted for consideration.

The Applicant wishes to thank the Examiner for the interview granted on September 9, 2004. In the interview, claims 1-10 and the Bagepalli et al. (U.S. Patent No. 6,030,175, "Bagepalli") reference were discussed. As a result of the interview, the Examiner indicated that the proposed claim amendments would overcome the objections and rejections noted in the Office Action, and that further consideration would be given to the Applicant's claims in view of the Applicant's clarification of the splitting surfaces and splitting direction extending surfaces during the interview.

The specification was objected to under 37 C.F.R. § 1.75(d)(1) and MPEP § 608.01(o) as failing to provide proper antecedent basis for the claimed subject matter of claims 9 and 10. Although the Office Action referred to claim 8, the Applicant notes that claim 8 is compliance with U.S. patent practice. Claims 9 and 10 were also rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. During the interview, the Applicant discussed the objection and rejection to claims 9 and 10, clarified that the radial step and axial step are formed at only one axial side of the brush seal as recited in claim 9; and that the different circumferential positions comprise different radial

planes as recited in claim 10. Claims 9 and 10 have been amended responsive to the objection and rejection. Support for the subject matter and amendments to claims 9 and 10 can be found in Figures 1-4 of the application as originally filed. The Applicant respectfully submits that all claims are in compliance with U.S. patent practice.

Claims 6 and 8-10 were rejected under 35 U.S.C. §102(b) as being anticipated by Bagepalli. Claims 8-10 depend from claim 6. The Applicant respectfully submits that claims 6 and 8-10 recite subject matter that is neither disclosed nor suggested by Bagepalli.

According to U.S. patent practice, a reference must teach every element of a claim in order to properly anticipate the claim under 35 U.S.C. §102. In addition, “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628,631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “Every element of the claimed invention must be arranged as in the claim . . . the identical invention, specifically, [t]he identical invention must be shown in as complete detail as contained in the claim.” Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236 (Fed. Cir. 1989) (emphasis added).

The Applicant respectfully submits that Bagepalli does not disclose or suggest the claimed features of the invention. Claim 6, as amended, recites split-body parts which hold the brush seal and each of which has connecting portions that are split and that extend along the splitting surfaces, wherein each of the splitting surfaces has not only axial step but also radial step, the splitting surfaces being formed at different circumferential positions on both axial sides of the brush seal. In contrast, Bagepalli

discloses labyrinth-seal segments 26, 28 that are formed at the same circumferential position on both axial sides of the brush seal segment 32.

Since the splitting surfaces in the present invention are formed at different circumferential positions on both axial sides of the brush seal, leak flows axially across the split body parts can be effectively prevented. In contrast, Bagepalli discloses that “the first and second labyrinth-seal segments each have generally radially-aligned circumferential ends.” See column 2, lines 17-19 of Bagepalli. Therefore, any leak flows across the upper surfaces of the labyrinth-seal segments 26 and 28 in Bagepalli are straight and cannot be prevented. Accordingly, Bagepalli does not disclose or suggest each and every feature of the invention as recited in claim 6.

Claims 1, 2, 4, 5, and 7 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bagepalli et al. (U.S. Patent No. 6,030,175, “Bagepalli”) in view of Tong (U.S. Patent No. 6,431,550). Claims 2, 4, and 5 depend from claim 1. Bagepalli was cited for disclosing many of the claimed elements of the invention with the exception of each of the splitting direction-extending surfaces having shutoff means for sealing a gap between the splitting direction-extending surfaces that are combined with each other. Tong was cited for curing these deficiencies. The Applicant traverses the rejection and respectfully submits that claims 1, 2, 4, 5, and 7, recite subject matter that is neither disclosed nor suggested by the cited prior art.

Under U.S. patent practice, the PTO has the burden under §103 to establish a *prima facie* case of obviousness. In re Fine, 5 U.S.P.Q.2nd 1596, 1598 (Fed. Cir. 1988). Both the case law of the Federal Circuit and the PTO itself have made clear that where a modification must be made to the prior art to reject or invalidate a claim under

§103, there must be a showing of proper motivation to do so. The mere fact that a prior art reference could arguably be modified to meet the claim is insufficient to establish obviousness. The PTO can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. Id. In order to establish obviousness, there must be a suggestion or motivation in the reference to do so. See also In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984) (prior art could not be turned upside down without motivation to do so); In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Lee, 277 F.3d 1338 (Fed. Cir. 2002).

The Applicant respectfully submits that the combination of Bagepalli and Tong fails to disclose or suggest each and every feature of the invention as recited in the claims. Claims 1 and 7 recite, split-body parts which hold the brush seal and each of which has connecting portions that are split and that extend along the splitting surfaces . . . wherein said splitting surfaces are formed at different circumferential positions on both axial sides of the brush seal. As discussed above with respect to claim 6, Bagepalli fails to disclose at least the feature of split body parts which hold the brush seal and each of which has connecting portions that are split and that extend along the splitting surfaces, . . . wherein said splitting surfaces are formed at different circumferential positions on both axial sides of the brush seal. In contrast, Bagepalli discloses that “the first and second labyrinth-seal segments each have generally radially-aligned circumferential ends.” See column 2, lines 17-19 of Bagepalli. Also, the Figures of Bagepalli show that the labyrinth-seal segments 26 and 28 of Bagepalli are

formed at the same position on both sides of the brush seal segment 32. Therefore, Bagepalli does not disclose or suggest that splitting surfaces are formed at different circumferential positions on both sides of the brush seal as recited in claims 1 and 7.

Tong fails to cure this deficiency in Bagepalli with respect to claims 1 and 7, as Tong fails to disclose split-body parts which hold the brush seal and each of which has connecting portions that are split and that extend along the splitting surfaces. Tong further does not disclose or suggest splitting surfaces are formed at different circumferential positions on both axial sides of the brush seal. Therefore, for similar reasons, Bagepalli and Tong fail to disclose or suggest the features of the invention as recited in claims 1 and 7.

As such, the combination of Bagepalli and Tong fails to disclose or suggest each and every feature of the invention as recited in claims 2, 4, and 5. In view of the above, the Applicant respectfully submits that Bagepalli and Tong do not support a *prima facie* case of obviousness for purposes of a rejection of claims 1, 2, 4, 5 and 7 under 35 U.S.C. §103.

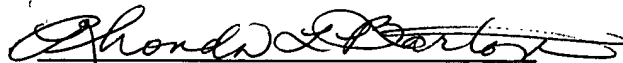
Claim 3 was rejected under 35 U.S.C. §103(a) as being unpatentable over Bagepalli in view of Tong and further view of Julien et al. (U.S. Patent No. 5,226,683, "Julien"). Bagepalli and Tong were cited for disclosing many of the claimed elements of the invention with the exception of the shutoff means having a sealing plate made from a super-elastic alloy material on the contact surfaces. Julien was cited for curing this deficiency. The Applicant respectfully submits that as claim 3 depends from claim 1, claim 3 is allowable for at least this reason. Further the combination of Bagepalli, Tong and Julien fails to disclose or suggest the features of the invention as recited in claim 3.

Claims 2-5 depend from claim 1 and claims 8-10 depend from claim 6. The Applicant respectfully submits that these dependent claims are allowable for at least because of their dependency from allowable base claims 1 and 6. Accordingly, the Applicant respectfully requests allowance of claims 1-10 and the prompt issuance of a Notice of Allowability.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing attorney docket no. 108179-00006.**

Respectfully submitted,



Rhonda L. Barton  
Attorney for Applicant  
Registration No. 47,271

**Customer No. 004372**  
ARENT FOX PLLC  
1050 Connecticut Avenue, N.W.,  
Suite 400  
Washington, D.C. 20036-5339  
Tel: (202) 857-6000  
Fax: (202) 638-4810

RLB/wbp

Enclosure: Petition for Extension of Time (1 month)